

## SCANNING RECEIVER FOR USE IN POWER AMPLIFIER LINEARIZATION

### Abstract of the Invention

A feed forward power amplifier system and method identify active channels across a frequency band to suppress unwanted intermodulation distortion (IMD) products in a communications signal such as a single- or multi-carrier communications signal. A scanning receiver identifies at least  
5 one active channel in a frequency band, and identifies at least one portion of the frequency band likely to include IMD products based upon the identified active channel(s). Based upon the identified portion of the frequency band, IMD products are suppressed from the communications signal, e.g., by controlling the magnitude and/or phase of a suppression  
10 signal mixed with the communications signal.